



PTO/SB/21 (09-04)

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TRANSMITTAL FORM

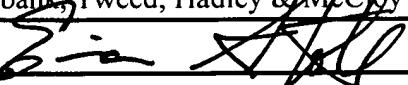
(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/724,833
Filing Date	December 2, 2003
First Named Inventor	Thomas Nelson
Art Unit	1653
Examiner Name	Rooke, Agnes Beata
Attorney Docket Number	17357.01302US

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Remarks 1. Copies of 21 References 2. Check 3827 (\$180.00)		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Milbank, Tweed, Hadley & McCloy LLP		
Signature			
Printed name	Einar Stole		
Date	December 15, 2004	Reg. No.	47,272

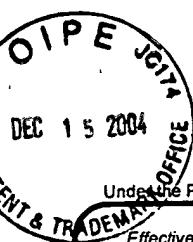
CERTIFICATE OF TRANSMISSION/MAILING

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DEC 15 2004

PTO/SB/17 (11-04)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Effective on 10/01/2004. Patent fees are subject to annual revision.

FEE TRANSMITTAL

For FY 2005

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 180.00)

Complete if Known

Application Number	10/724,833
Filing Date	December 2, 2003
First Named Inventor	Thomas Nelson
Examiner Name	Rooke, Agnes Beata
Art Unit	1653
Attorney Docket No.	17357.01302US

METHOD OF PAYMENT (check all that apply)

 Check Credit Card Money Order

 Deposit Account None

Deposit Account Number
13-3250
Deposit Account Name

The Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below
 Charge fee(s) indicated below, except for the filing fee
 Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17
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FEE CALCULATION

1. BASIC FILING FEE

Fee Description	Fee (\$)	Small Entity Fee (\$)	Fee Paid (\$)
Utility Filing Fee	790	395	_____
Design Filing Fee	350	175	_____
Plant Filing Fee	550	275	_____
Reissue Filing Fee	790	395	_____
Provisional Filing Fee	160	80	_____

Subtotal (1) \$ _____

Subtotal (2) \$ _____

2. EXTRA CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20	18	9
Each independent claim over 3	88	44
Multiple dependent claims	300	150
For Reissues, each claim over 20 and more than in the original patent	18	9
For Reissues, each independent claim more than in the original patent	88	44

Total Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**
- 20 or HP = _____ x _____ = _____
HP = highest number of total claims paid for, if greater than 20

Indep. Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**
- 3 or HP = _____ x _____ = _____
HP = highest number of independent claims paid for, if greater than 3

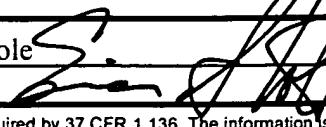
Multiple Dependent Claims **Fee (\$)** **Fee Paid (\$)**

3. OTHER FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)	Fee Paid (\$)
1-month extension of time	110	55	_____
2-month extension of time	430	215	_____
3-month extension of time	980	490	_____
4-month extension of time	1,530	765	_____
5-month extension of time	2,080	1,040	_____
Information disclosure stmt. fee	180	180	180.00
37 CFR 1.17(q) processing fee	50	50	_____
Non-English specification	130	130	_____
Notice of Appeal	340	170	_____
Filing a brief in support of appeal	340	170	_____
Request for oral hearing	300	150	_____
Other:	_____	_____	_____

Subtotal (3) \$ 180.00

SUBMITTED BY

Signature	Einar Stole 	Registration No. (Attorney/Agent) 47,272	Telephone 202-835-7553
Name (Print/Type)			Date December 15, 2004

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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ATTORNEY DOCKET NO. 17357.01302US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Thomas Nelson) Group Art Unit: 1653
Filed: December 2, 2003) Examiner: Rooke, Agnes Beata
For: *Artificial Low-Density Lipoprotein*)
 Carriers for Transport of Substances)
 Across the Blood-Brain Barrier)

INFORMATION DISCLOSURE STATEMENT

Mail Stop DD
Commissioner of Patents
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, and in compliance with the duty of disclosure set forth in C.F.R. § 1.56, applicants are submitting herewith copies of references listed on the attached Forms PTO/SB/08A and PTO/SB/08B for consideration and to be made of record herein by the U.S. Patent and Trademark Office in the above-captioned application.

Consideration of the foregoing plus the prompt return of a copy of the enclosed Forms PTO/SB/08A and PTO/SB/08B with the Examiner's initials in the left column in accordance with MPEP 609 are respectfully requested.

Applicants' submission of the Information Disclosure Statement (IDS) shall not be construed as an admission that the cited references are prior art to the present invention, or that the cited references qualify as printed publications. The submission of this IDS also shall not be construed as a representation that a prior art search has been performed.

In accordance with 37 C.F.R. § 1.97(c), this Information Disclosure Statement is believed submitted before the mailing of a final Official Action and is accompanied by the required fee under § 1.17(p). In the even any additional fee is deemed necessary, the Commissioner is authorized to charge the undersigned's Deposit Account No. 13-3250 under referenced No. 17357.01302US.

12/16/2004 ZJUXAR1 00000022 10724833

01 FC:1806

180.00 CP

DCI:#8110109

Respectfully submitted,
MILBANK, TWEED, HADLEY & McCLOY LLP

December 15, 2004

By: 
Einar Stole
Registration No., 47,272

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DEC 15 2004

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

Approved for use through September 30, 2007. GPO 2007-090.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 4

Complete if Known	
Application Number	10/724,833
Filing Date	December 2, 2003
First Named Inventor	Thomas Nelson
Art Unit	1653
Examiner Name	Rooke, Agnes Beata
Attorney Docket Number	17357.01302US

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)			
		WO 98/13385	04/02/1998	Univ. of Strathclyde	
		WO 99/04761	02/04/1999	Pharmacia & Upjohn	
		EP 0 277 849 A1	08/10/1988	Ire Celltarg SA	
		WO WO 92/21330	12/10/1992	Samain et al.	
		WO 87/02061	04/09/1987	Protter et al.	

Examiner Signature		Date Considered	
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***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449/PTO				Complete if Known	
				Application Number	10/724,833
				Filing Date	December 2, 2003
				First Named Inventor	Thomas Nelson
				Art Unit	1653
				Examiner Name	Rooke, Agnes Beata
Sheet	2	of	4	Attorney Docket Number	17357.01302US

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
		Rensen et al., "Human Recombinant Apolipoprotein E-Enriched Liposomes Can Mimic Low-Density Lipoproteins as Carriers for the Site-Specific Delivery of Antitumor Agents." Molecular Pharmacology, 52:445-455, September 1997, XP-002273272			
		Kreuter et al., "Apolipoprotein-mediated Transport of Nanoparticle-bound Drugs Across the Blood-Brain Barrier." Journal of Drug Targeting, 2002 Vol. 10(4) pp. 317-325, XP009027368			
		Versluis et al., "Synthesis of a Lipophilic Daunorubicin Derivative and Its Incorporation into Lipidic Carriers Developed for LDL Receptor-Mediated Tumor Therapy." Pharmaceutical Research, Vol. 15, No. 4, 1998, XP009036781			
		Masquelier et al., "Low Density Lipoprotein as a Carrier of Cytostatics in Cancer Chemotherapy: Study of Stability of Drug-Carrier Complexes in Blood." Journal of Drug Targeting, 2000, Vol. 8, No. 3, pp. 155-164, XP009027575			
		Masquelier et al., "Plasma stability and cytotoxicity of lipophilic daunorubicin derivatives incorporated into low density lipoproteins." Eur. J. Med. Chem. 35 (2000) 429-438			
		Murtha et al., "Synthesis of the Cholesteryl Ester Prodrugs Cholesteryl Ibuprofen and Cholesteryl Flufenamate and Their Formulation into Phospholipid Microemulsions." 1088 Journal of Pharmaceutical Sciences, 83 (1994) September, No. 9, DC, US, XP 00465804			
		Rensen et al., "Recombinant lipoproteins: lipoprotein-like lipid particles for drug targeting." Advanced Drug Delivery Reviews 47 (2001) 251-276, XP-002273271			
		Bhattacharya et al., "Novel distamycin analogues: facile synthesis of cholesterol conjugates of distamycin-like oligopeptides." Tetrahedron Letters 42 (2001) 3499-3502, XP-002299552			
		Reinhardt, R.R. et al., "Insulin-Like Growth Factors Cross the Blood-Brain Barrier," Endocrinology, Vol. 135, No. 5			
		Witt, Ken A. et al., "Insulin Enhancement of Opioid Peptide Transport across the Blood-Brain Barrier and Assessment of Analgesic Effect," The Journal of Pharmacology and Experimental Therapeutics, Vol. 295, No. 3, 3100/866639			

Examiner Signature	Date Considered
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Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/724,833
(Use as many sheets as necessary)				Filing Date	December 2, 2003
				First Named Inventor	Thomas Nelson
				Art Unit	1653
				Examiner Name	Rooke, Agnes Beata
Sheet	3	of	4	Attorney Docket Number	17357.01302US

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
		Rigotti, Attilio et al., "The Class B Scavenger Receptors SR-BI and CD36 Are Receptors for Antionic Phospholipids," The Journal of Biological Chemistry, Vol. 270, No. 27, Issue of July 7, pp. 16221-16224, 1995			
		Bradley, William et al., "Low-density Lipoprotein Receptor Binding Determinants Switch from Apolipoprotein E to Apolipoprotein B during Conversion of Hypertriglyceridemic Very-low-density Lipoprotein to Low-density Lipoproteins." The Journal of Biological Chemistry, Vol. 259, No. 23, Issue of December 10, pp. 14728-14735, 1984			
		Veingergs, Isaac et al., "Neurotoxic Effects of Apolipoprotein E4 are Mediated via Dysregulation of Calcium Homeostasis," Journal of Neuroscience Research 67:379-387 (2002)			
		Shibata, Masayoshi et al., "Clearance of Alzheimer's amyloid-B1-40 peptide from brain by LDL receptor-related protein-1 at the blood-brain barrier," The Journal of Clinical Investigation, December 2000, Vol. 106, No. 12			
		Alyaudtin, Renad et al. "Interaction of Poly(butylcyanoacrylate) Nanoparticles with Blood-Brain Barrier in vivo and in vitro," Journal of Drug Targeting, 2001, Vol. 9, No. 3, pp. 209-221			
		Kang, Young-Sook et al., "Stability of the Disulfide Bond in an Avidin-Biotin Linked Chimeric Peptide During in vivo Transcytosis Through Brain Endothelial Cells," Journal of Drug Targeting, 2000, Vol. 8, No. 6, pp. 425-434			
		Pardridge, William M., "CNS Drug Design Based on Principles of Blood-Brain Barrier Transport," J. Neurochem., Vol. 70, No. 5, 1998			
		Bickel, Ulrich et al., "Delivery of peptides and proteins through the blood-brain barrier," Advanced Drug Delivery Reviews, 10 (1993) 205-245			
		Hevonen, Tiiia et al., "Structure of low density lipoprotein (LDL) particles: Basis for understanding molecular changes in modified LDL," Biochimica et Biophysica Acta 1488 (2000) 189-210			
		Pardridge, William M. et al., "Blood-Brain Barrier: Interface Between Internal Medicine and the Brain," Annals of Internal Medicine, 1986; 105: 82-95			

Examiner Signature		Date Considered	
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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Sheet 4		of 4	Application Number	10/724,833
			Filing Date	December 2, 2003
			First Named Inventor	Thomas Nelson
			Art Unit	1653
			Examiner Name	Rooke, Agnes Beata
			Attorney Docket Number	17357.01302US

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		Wu, Dafang et al., "Pharmacokinetics and Brain Uptake of Biotinylated Basic Fibroblast Growth Factor Conjugated to a Blood-Brain Barrier Drug Delivery System," Journal of Drug Targeting, 2002 Vol. 10(3), pp. 239-245	
		Mims, Marth P. et al., "Effect of Particle Size and Temperature on the Conformation and Physiological Behavior of Apolipoprotein E Bound to Model Lipoprotein Particles," Biochemistry 1990, 29, 6639-6647	
		Hotlzman, David M., "Role of apoE/AB Interactions in the Pathogenesis of Alzheimer's Disease and Cerebral Amyloid Angiopathy," Journal of Molecular Neurosciences, Vol. 17, 2001, pp. 147-155	

Examiner Signature	Date Considered
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